

U.S. Serial No.: 10/708,919
File: March 31, 2004
Group Art Unit: 2918
Examiner: David C. Comstock
Atty. Docket No: 101896-241 (DEP-5293)

AMENDMENTS TO THE DRAWINGS

The attached Replacement Sheet includes new FIG. 1E.

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REMARKS

The pending Office Action addresses claims 1, 2, 7-20, 42, 43, and 45-50. Claims 3-6, 21-41, 44, and 51-59 are withdrawn. Claims 1, 2, 7-16, 20, 42, 43, and 45-50 are rejected. Applicants appreciate the Examiner's indication that claims 17-19 represent allowable subject matter and would be allowed if amended to include all of the limitations of the base claim and any intervening claims.

Amendments to the Claims

Applicants cancel claims 3-6, 11-12, 21-41, 44-45, and 51-59, and amend claims 1, 13, 14, 20, 42, 43, and 46. Independent claims 1 and 43 are amended to recite some of the features previously recited in claims 11 and 12. Claims 13, 14, and 20 are amended to correspond to amended claim 1. Claims 42 and 43 are amended to include some of the limitations previously recited in claim 44. Claim 46 is amended to correct a typographical error.

No new subject matter is added.

Amendments to the Specification

Applicants amend the specification to include language recited in original claims 8, 9, 49, and 50. Applicants also amend the specification to correct a typographical error. No new matter is added.

Drawings

The Examiner objects to the drawings for failing to show the spinal fixation plate recited in claims 8 and 9. While Applicants do not believe a drawing is necessary to illustrate a spinal fixation plate, new FIG. 1E is added illustrating a spinal fixation plate 12b', rather than a spinal fixation rod 12b as shown in FIG. 1A. Support for new FIG. 1E can be found throughout the specification and original claims, for example at paragraph 0027, which states that the elongate members can be "spinal rod and/or plates" Applicants have also amended the specification to refer to new Figure 1E. No new matter is added.

The Examiner also objects to the drawings for failing to show a terminal end of the second elongate element positioned at an angle relative to the longitudinal axis of the second elongate element, as recited in claim 49, and for failing to specifically show an angle of about

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90°, as recited in claim 50. While Applicants do not believe a drawing showing a terminal end angled at 90° is necessary, new FIG. 1E illustrates a terminal end 13' of an elongate member 12a' extending at a 90° angle relative to a longitudinal axis of the elongate member 12a'.

Accordingly, new FIG. 1E obviates the basis for these rejections.

Rejection Pursuant to 35 U.S.C. §112

The Examiner rejects claims 8, 9, 49, and 50 pursuant to 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Applicants respectfully disagree.

Claim 8 recites that the first and second elongate members each comprise a spinal fixation plate, and claim 9 recites that the first elongate member is a spinal fixation rod and the second elongate member is a spinal fixation plate. New FIG. 1E illustrates such a feature, thereby obviating the basis for this rejection.

Claim 49 recites that the terminal end of the second elongate element is positioned at an angle relative to a longitudinal axis of the second elongate element, and claim 50 recites that the angle is 90°. New FIG. 1E likewise illustrates such a feature, thereby obviating the basis for this rejection.

Rejections Pursuant to 35 U.S.C. §102

(1) U.S. Patent No. 4,433,677 of Ulrich et al.

Claims 1, 2, 7, 11, 12, 20, 42, 43, 45, 46, 48, and 49 are rejected pursuant to 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,433,677 of Ulrich et al.

Independent claim 1 recites a spinal fixation device having a first elongate member having a female connector with opposed arms and a second elongate member having a male connector adapted to mate to the female connector. The first and second elongate members are coupled to one another such that the first and second elongate members are angularly adjustable relative to one another. The device also has a locking mechanism adapted to lock the elongate members in a fixed position relative to one another independent of a bone anchor.

Ulrich does not teach or suggest a first elongate member having a female connector with opposed arms that receive a male connector formed on a second elongate member. Rather, as

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shown in FIG. 3 and 4, Ulrich discloses that two bone screws, each of which has a head formed therein with a bore formed therein for receiving a bolt to mate the two bone screws to one another. Neither of the heads has a female connector with opposed arms, as recited in claim 1. Accordingly, independent claim 1, as well as claims 2, 7, and 20 which depend therefrom, distinguish over Ulrich.

Independent claims 42 and 43 recite a spinal fixation device having first and second elongate members with connecting features that mate such that the first and second elongate members are angularly adjustable relative to one another along a plane. Claims 42 and 43 also recite a locking mechanism that extends into or locks the connecting features. The locking mechanism extends along an axis that is substantially *parallel* to the plane of angular adjustability of each elongate member. Ulrich does not teach or even suggest a locking mechanism that extends along an axis that is substantially parallel to the plane of angular adjustability of each elongate member. Rather, as shown in FIG. 4, the axis (A') of the screw (16) extends perpendicular to the plane in which the bone screws rotate. Accordingly, independent claims 42 and 43 distinguish over Ulrich.

Independent claim 46 recites a spinal fixation device having a first elongate element with a clamping mechanism formed on a terminal end thereof, and a second elongate element with a terminal end that is adapted to be received by the clamping mechanism on the first elongate element. As explained above, Ulrich does not teach or suggest a first elongate element that is received within a second elongate element, much less a clamping mechanism to mate two elongate members. Accordingly, independent claim 46, as well as claim 48 which depends therefrom, therefore distinguishes over Ulrich.

(2) U.S. Patent No. 6,007,536 of Yue

The Examiner also rejects claims 1, 2, 9, 11-16, 20, 42, and 43 pursuant to 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,007,536 of Yue.

At the outset, Yue does not teach or even suggest a spinal fixation device. Rather, Yue teaches an orthopedic device to fix long bones in the body. Regardless, Yue does not teach a device having a first elongate member with a female connector having opposed arms for receiving a male connector on a second elongate member, as required by independent claims 1, 42, and 43. Rather, Yue discloses a blade (1) having gears formed thereon that mate with

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corresponding gears formed on a side plate (2). Neither component forms a male connector that is received within a female connector. Accordingly, claims 1, 42, and 43, as well as claims 2, 13-16, and 20 which depend from claim 1, therefore distinguish over Yue.

Rejections Pursuant to 35 U.S.C. §103

(1) U.S. Patent No. 4,433,677 of Ulrich et al.

Dependent claims 10, 47, and 50 are rejected pursuant to 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 4,433,677 of Ulrich et al. As explained above, independent claims 1 and 46 distinguish over Ulrich and represent allowable subject matter. Claims 10 and 47, which depend from claims 1 and 46, respectively, therefore distinguish over Ulrich at least because they depend from an allowable base claim.

Conclusion

Applicants submit that all pending claims are now in condition for allowance, and allowance thereof is respectfully requested. The Examiner is encouraged to telephone the undersigned attorney for Applicants if such communication is deemed to expedite prosecution of this application.

Respectfully submitted,

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